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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,917	01/25/2001	Noriaki Matsui	1232-4675	6157
27123	7590	08/26/2004	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			THOMPSON, JAMES A	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/769,917

Applicant(s)

MATSUI ET AL.

Examiner

James A Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-23 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 states that "the acquisition step of the second shading correction data is executed before start of read of the document sheet regardless of a determination result." Is said determination result the determination of whether the document sheet is the first document sheet, or does said determination result refer to the result of the determination step in claim 15, upon which claim 22 depends? Claim 22, as currently written, is indefinite in regards to this issue.

4. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 23 states that "said acquisition step of the first shading correction data is skipped regardless of a determination result." Is said determination result the determination of whether the document sheet is the first document sheet, or does said determination result refer to the result of the determination step in claim 15, upon which claim 23 ultimately depends? Claim 23, as currently written, is indefinite in regards to this issue.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 11, 15-19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimoto (US Patent 5,371,613) in view of Webb (US Patent 5,278,674).

**Regarding claims 1, 11, 15 and 25:** Arimoto discloses an apparatus (figure 2 of Arimoto) comprising a light source (figure 2(205) of Arimoto) adapted to illuminate a document (column 4, lines 59-63 of Arimoto); a plurality of image sensing elements (figure 2(210) of Arimoto) adapted to output electrical signals in accordance with an input light quantity (column 4, lines 53-58 of Arimoto). As is well-known in the art, a CCD (figure 2(210) of Arimoto) contains a plurality of image sensing elements.

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Said apparatus further comprises a first reference member (figure 3(202) and column 16, lines 15-20 of Arimoto); and a second reference member (figure 3(301P) and column 16, lines 20-24 of Arimoto). A first standard member obtains a first standard signal (column 16, lines 15-20 of Arimoto), as a reference for correction (column 16, lines 17-18 of Arimoto), and a second standard member obtains a second standard signal (column 16, lines 20-24 of Arimoto), as a reference for correction (column 16, lines 21-22 of Arimoto).

Said apparatus further comprises a line counter (figure 1(104) of Arimoto) that counts the number of lines read by the scanner (column 5, lines 5-10 of Arimoto). Since the light source (figure 2(205) of Arimoto) is moved at a constant speed (column 4, lines 59-60 of Arimoto) and is turned on at the initiation of scanning (column 6, lines 60-63 of Arimoto), said line counter therefore operates as a timer adapted to measure a time since said light source is turned on, said time simply being the distance corresponding to said number of lines divided by the speed that said light source is moving.

Said apparatus further comprises a controller (figure 1(106(portion)) of Arimoto) adapted to determine whether the number of lines, and therefore time, measured by said timer (line counter) reaches a predetermined time (line number) (column 7, lines 8-12 of Arimoto). In a case that the predetermined time (line number) has not elapsed, acquiring shading correction by a first method using said first reference member illuminated by said light source (column 7; lines 18-21, lines 45-47, and lines 56-59 of Arimoto). Before reaching the predetermined line number (line number 4744), a first reference member is used

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to compute values (column 7, lines 18-21 of Arimoto). Said values are used to compute conversion values (column 7, lines 45-47 of Arimoto) which are then used for the first method of shading correction (column 7, lines 56-59 of Arimoto). In a case that the predetermined time (line number) has elapsed, acquiring shading correction data by a second method using said second reference member illuminated by said light source (column 7, lines 8-12 and lines 28-30; and column 9, equation 1 and lines 50-51 of Arimoto). When the predetermined line number (line number 4744) has been reached (column 7, lines 8-12 of Arimoto), a second reference member is used to compute values (column 7, lines 28-30 of Arimoto), which are then used in a second method (column 9, equation 1 and lines 50-51 of Arimoto) to acquire shading correction data (column 7, lines 58-59 of Arimoto). The CPU (figure 1(106) of Arimoto), along with the included ROM, performs the basic operations of the scanner (column 5, lines 15-23 of Arimoto). Therefore, the controller corresponds to the portions of the program software physically embodied in the included ROM and the portion of the CPU used to execute the controller functions.

Arimoto does not disclose expressly that said predetermined time is the time until an image signal value of the image sensing element that outputs a maximum signal value changes to a predetermined rate since said light source is turned on.

Webb discloses correcting a light source illumination level (column 8, lines 46-50 of Webb), based on a predetermined distance (column 8, lines 41-44 of Webb) in which the illumination changes from its maximum value to a

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predetermined rate, said predetermined rate being any substantial deviation from the expected intensity (column 8, lines 44-46 of Webb). As discussed above, since the light source travels at a constant speed, the predetermined distance therefore also corresponds to a predetermined time.

Arimoto and Webb are combinable because they are from the same field of endeavor, namely the control and correction of scanner illumination and scanned image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to place said first reference member and said second reference member so that said predetermined distance is the measured distance in which there is a substantial deviation from the expected illumination intensity. The motivation for doing so would have been to maintain an even illumination across the entire document during scanning (column 8, lines 29-32 of Webb). Therefore, it would have been obvious to combine Webb with Arimoto to obtain the invention as specified in claims 1, 11, 15 and 25.

**Regarding claims 2 and 16:** Arimoto discloses that, in the first method, a coefficient ( $B_d$ ) for uniformly changing level of the shading correction data (column 7, lines 56-59 of Arimoto) is generated on the basis of data ( $B_{ave1}$ ) obtained by scanning said first reference member by said image sensing elements (column 7, lines 18-21 and lines 45-47 of Arimoto).

Arimoto further discloses that, in the second method, shading correction data of each pixel in a main scanning direction is generated by scanning said second reference member by said image sensing elements (column 7, lines 8-12 and lines 28-30; and column 9, equation 1 and lines 50-51 of Arimoto). The

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second reference member is used to compute values (column 7, lines 28-30 of Arimoto), which are then used in a second method (column 9, equation 1 and lines 50-56 of Arimoto) to acquire shading correction data (column 7, lines 58-59 of Arimoto).

**Regarding claim 3:** Arimoto discloses a correction unit (figure 1 (106(portion)) of Arimoto) which uses the shading correction data to perform shading correction on the electrical signals output from said image sensing elements (column 7, lines 56-59 of Arimoto). The CPU (figure 1(106) of Arimoto), along with the included ROM, performs the basic operations of the scanner (column 5, lines 15-23 of Arimoto). Therefore, the correction unit corresponds to the portions of the program software physically embodied in the included ROM and the portion of the CPU used to execute the correction unit functions.

**Regarding claim 17:** Arimoto discloses performing shading correction on the electrical signals output from the image sensing elements (column 7, lines 56-59 of Arimoto) by using the first shading correction data (column 7, lines 18-21 and lines 45-47 of Arimoto) or the second shading correction data (column 9, equation 1 and lines 50-56 of Arimoto).

**Regarding claims 4 and 18:** Arimoto discloses that said first and second reference members comprise white plates (column 6, lines 19-21 and lines 41-43 of Arimoto).

**Regarding claims 5 and 19:** Arimoto discloses that said first reference member is set at an end portion of a main scanning direction at a predetermined

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position of a subscanning direction (figure 3(202) and column 5, lines 46-48 of Arimoto). The first reference member (figure 3(202) of Arimoto) spans the length of the pixel addresses (column 5, lines 46-48 of Arimoto) and is thus set at an end portion of a main scanning direction. As can be clearly seen in figure 3 of Arimoto, said first reference member is set at a particular predetermined position of a subscanning direction since it is set from the far left to a particular width in the sub-scan direction, said sub-scan direction being labeled in figure 3 of Arimoto.

Arimoto further discloses that said second reference member is set in the main scanning direction at a predetermined position in the subscanning direction (column 6, lines 26-33 of Arimoto).

7. Claims 6-9 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimoto (US Patent 5,371,613) in view of Webb (US Patent 5,278,674) and Shirato (US Patent 4,680,644).

**Regarding claim 6:** Arimoto in view of Webb discloses the determination by said controller, as discussed above in the arguments regarding claims 1, 11, 15 and 25.

Arimoto in view of Webb does not disclose expressly that the determination by said controller is performed before each document sheet is read.

Shirato discloses a control section (figure 4(401) of Shirato) that determines light compensation (column 5, lines 8-14 of Shirato), via specific

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steps (column 5, lines 17-34 of Shirato), before each document sheet is read (column 5, lines 40-45 of Shirato).

Arimoto in view of Webb is combinable with Shirato because they are from the same field of endeavor, namely the control and correction of scanner illumination and scanned image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform the determination step taught by Arimoto in view of Webb before each document sheet is read, as taught by Shirato. The motivation for doing so would have been to compensate for time-dependent and environmental changes (column 5, lines 51-55 of Shirato). Therefore, it would have been obvious to combine Shirato with Arimoto in view of Webb to obtain the invention as specified in claim 6.

**Regarding claim 7:** Arimoto discloses a document feeder (figure 2(200) of Arimoto) capable of successively supplying a plurality of document sheets (column 4, lines 1-3 of Arimoto).

Arimoto in view of Webb discloses the determination by said controller, as discussed above in the arguments regarding claims 1, 11, 15 and 25.

Arimoto in view of Webb does not disclose expressly that said controller performs the determination in a case that said document feeder supplies each document sheet to a predetermined position.

Shirato disclose a control section (figure 4(401) of Shirato) that performs determination of light compensation (column 5, lines 8-14 of Shirato) in a case that each document sheet is supplied to a predetermined position (column 5, lines 24-29 of Shirato). In order for each line of the original document sheet to be

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read and to be confirmed to have been read (column 5, lines 25-29 of Shirato), then said original document sheet must be supplied to a predetermined position.

Arimoto in view of Webb is combinable with Shirato because they are from the same field of endeavor, namely the control and correction of scanner illumination and scanned image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform the determination step taught by Arimoto in view of Webb, after supplying each document sheet to a predetermined position, as taught by Shirato. The motivation for doing so would have been to be able to check to see if each line of the original document sheet has been read or not (column 5, lines 25-26 of Shirato). Therefore, it would have been obvious to combine Shirato with Arimoto in view of Webb to obtain the invention as specified in claim 7.

**Regarding claim 8:** Arimoto discloses that, in a case that a first document sheet is to be read after the light source is turned on (column 10, lines 11-13 of Arimoto), said controller acquires shading correction data using said second reference member (figure 3(301P) and column 8, line 67 to column 9, line 5 of Arimoto) before start of read of the document sheet (column 8, lines 59-63 and column 10, lines 11-13 of Arimoto).

**Regarding claim 9:** Arimoto discloses that, in a case that a first document sheet is to be read after the light source is turned on (column 10, lines 11-13 of Arimoto), and the predetermined time has not elapsed, said controller skips acquisition of shading correction data using said first reference member (column 8, lines 59-63 of Arimoto). Since the optical system moves to the point

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of said second reference member just before turning the lamp on (column 8, lines 59-63 of Arimoto) and obtains the relevant data for calculations (column 9, lines 1-5 of Arimoto), said first reference member is therefore skipped. Since the reading of the data from said second reference member occurs right after the lamp is turned on (column 8, lines 59-63 of Arimoto), the amount of time elapsed before reading the correction data from said second reference member is zero. Therefore, it is not possible for said predetermined time to have elapsed.

**Regarding claim 20:** Arimoto in view of Webb discloses the determination step and acquisition step of the first shading correction data and the second shading correction data, performed by said controller, as discussed above in the arguments regarding claims 1, 11, 15 and 25.

Arimoto in view of Webb does not disclose expressly that said determination step and said acquisition step of the first shading correction data or the second shading correction data are performed before each document sheet is read.

Shirato discloses a control section (figure 4(401) of Shirato) that determines light compensation (column 5, lines 8-14 of Shirato) and the acquisition of said compensation data (column 5, lines 17-21 of Shirato), via specific steps (column 5, lines 17-34 of Shirato), before each document sheet is read (column 5, lines 40-45 of Shirato).

Arimoto in view of Webb is combinable with Shirato because they are from the same field of endeavor, namely the control and correction of scanner illumination and scanned image data. At the time of the invention, it would have

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been obvious to a person of ordinary skill in the art to perform the determination step and the acquisition step of the first shading correction data or the second shading correction data, taught by Arimoto in view of Webb, before each document sheet is read, as taught by Shirato. The motivation for doing so would have been to compensate for time-dependent and environmental changes (column 5, lines 51-55 of Shirato). Therefore, it would have been obvious to combine Shirato with Arimoto in view of Webb to obtain the invention as specified in claim 20.

**Regarding claim 21:** Arimoto discloses a document feeder (figure 2(200) of Arimoto) capable of successively supplying a plurality of document sheets (column 4, lines 1-3 of Arimoto).

Arimoto in view of Webb discloses the determination step and acquisition step of the first shading correction data and the second shading correction data, performed by said controller, as discussed above in the arguments regarding claims 1, 11, 15 and 25.

Arimoto in view of Webb does not disclose expressly that said determination step and said acquisition step of the first shading correction data and the second shading correction data are performed in a case that said document feeder supplies each document sheet to a predetermined position.

Shirato disclose a control section (figure 4(401) of Shirato) that determines light compensation (column 5, lines 8-14 of Shirato) and the acquisition of said compensation data (column 5, lines 17-21 of Shirato), via specific steps (column 5, lines 17-34 of Shirato), in a case that each document sheet is supplied to a

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predetermined position (column 5, lines 24-29 of Shirato). In order for each line of the original document sheet to be read and to be confirmed to have been read (column 5, lines 25-29 of Shirato), then said original document sheet must be supplied to a predetermined position.

Arimoto in view of Webb is combinable with Shirato because they are from the same field of endeavor, namely the control and correction of scanner illumination and scanned image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform the determination step and the acquisition step of the first shading correction data or the second shading correction data, taught by Arimoto in view of Webb, after supplying each document sheet to a predetermined position, as taught by Shirato. The motivation for doing so would have been to be able to check to see if each line of the original document sheet has been read or not (column 5, lines 25-26 of Shirato). Therefore, it would have been obvious to combine Shirato with Arimoto in view of Webb to obtain the invention as specified in claim 21.

**Regarding claim 22:** Arimoto discloses determining whether a document sheet is a first document sheet after the light source is turned on (column 10, lines 11-13 of Arimoto), wherein, in a case that the document sheet is determined to be the first document sheet, said acquisition step of the second shading correction data (figure 3(301P) of Arimoto) is executed (column 8, line 67 to column 9, line 5 of Arimoto) before start of read of the document sheet regardless of a determination result (column 8, lines 59-63 and column 10, lines 11-13 of Arimoto).

**Regarding claim 23:** Arimoto discloses that, in a case that a document sheet is determined to be the first document sheet (column 10, lines 11-13 of Arimoto), said acquisition step of the first shading correction data is skipped regardless of the determination result (column 8, lines 59-63 of Arimoto). Since the optical system moves to the point of said second reference member just before turning the lamp on (column 8, lines 59-63 of Arimoto) and obtains the relevant data for calculations (column 9, lines 1-5 of Arimoto), said acquisition step of the first shading correction data is therefore skipped.

8. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimoto (US Patent 5,371,613) in view of Webb (US Patent 5,278,674) and Murayama (US Patent 4,797,943).

**Regarding claim 12:** The arguments regarding claims 1, 11, 15 and 25 are incorporated herein.

Arimoto discloses a correction unit (figure 1(106(portion)) of Arimoto) adapted to correct the electrical signals output from said image sensing elements (column 7, lines 56-59 of Arimoto), and to output an image signal (column 4, lines 64-66 of Arimoto). The CPU (figure 1(106) of Arimoto), along with the included ROM, which is a part of the signal processing unit (figure 2(211) and column 4, lines 67-68 of Arimoto), performs the basic operations of the scanner (column 5, lines 15-23 of Arimoto). Therefore, the correction unit corresponds to the portions of the program software physically embodied in the included ROM and the portion of the CPU used to execute the correction unit functions.

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Arimoto further discloses that said correction unit performs shading correction using at least the shading correction data (column 6, lines 10-14 of Arimoto).

Arimoto in view of Webb does not disclose expressly a print unit adapted to print an image of the document on a print medium on the basis of the image signal corrected by said correction unit.

Murayama discloses a print unit (figure 6(61) of Murayama) adapted to print an image of the document on a print medium on the basis of a received image signal (column 9, lines 60-62 of Murayama).

Arimoto in view of Webb is combinable with Murayama because they are from the same field of endeavor, namely the correction of scanners and scanned image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to receive the image signal corrected by said correction unit taught by Arimoto and use said print unit to print an image of the document corresponding to said corrected image signal on a print medium, as taught by Murayama. The motivation for doing so would have been to be able to output the data in a hardcopy form (column 9, lines 39-41 of Murayama), which is expected and desired in the printing arts. Therefore, it would have been obvious to combine Murayama with Arimoto in view of Webb to obtain the invention as specified in claim 12.

**Regarding claims 13:** Arimoto in view of Webb does not disclose expressly an output unit adapted to output the electrical signals corrected by said correction unit to an external device via a communication line; and an input unit

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adapted to input an image signal from the external device via the communication line, wherein said print unit prints an image on a print medium on the basis of the image signal input via said input unit.

Murayama discloses an output unit (figure 6(62) of Murayama) adapted to output the electrical signals of the modified image data to an external device via a communication line (column 9, lines 60-65 of Murayama); and an input unit (figure 6(59) of Murayama) adapted to input an image signal from the external device via the communication line (column 9, lines 57-59 of Murayama).

Murayama further discloses that said print unit prints an image on a print medium on the basis of the image signal input via said input unit (column 9, lines 57-62 of Murayama).

Arimoto in view of Webb is combinable with Murayama because they are from the same field of endeavor, namely the correction of scanners and scanned image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to receive an image signal over a communication line, as taught by Murayama, receive the image signal corrected by said correction unit taught by Arimoto in an external device over a communication line and use said print unit to print an image of the document corresponding to said corrected image signal on a print medium, as taught by Murayama. The motivation for doing so would have been to be able to remotely communicate the image data and corrected image data over a communication line, and to be able to output the data in a hardcopy form (column 9, lines 57-65 of Murayama), which is expected and desired in the printing arts. Therefore, it would have been obvious to

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combine Murayama with Arimoto in view of Webb to obtain the invention as specified in claim 13.

**Regarding claim 14:** The arguments regarding claims 1, 11, 15 and 25 are incorporated herein.

Arimoto discloses a correction unit (figure 1(106(portion)) of Arimoto) adapted to correct the electrical signals output from said image sensing elements (column 7, lines 56-59 of Arimoto), and to output an image signal (column 4, lines 64-66 of Arimoto). The CPU (figure 1(106) of Arimoto), along with the included ROM, which is a part of the signal processing unit (figure 2(211) and column 4, lines 67-68 of Arimoto), performs the basic operations of the scanner (column 5, lines 15-23 of Arimoto). Therefore, the correction unit corresponds to the portions of the program software physically embodied in the included ROM and the portion of the CPU used to execute the correction unit functions.

Arimoto further discloses that said correction unit performs shading correction using at least the shading correction data (column 6, lines 10-14 of Arimoto).

Arimoto in view of Webb does not disclose expressly an output unit adapted to output the electrical signals corrected by said correction unit to an external device via a communication line; an input unit adapted to input an image signal from the external device via the communication line; and a print unit adapted to print an image of the document on a print medium on the basis of the image signal corrected by said correction unit.

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Murayama discloses an output unit (figure 6(62) of Murayama) adapted to output the electrical signals of the modified image data to an external device via a communication line (column 9, lines 60-65 of Murayama); and an input unit (figure 6(59) of Murayama) adapted to input an image signal from the external device via the communication line (column 9, lines 57-59 of Murayama).

Murayama discloses a print unit (figure 6(61) of Murayama) adapted to print an image of the document on a print medium on the basis of a received image signal (column 9, lines 60-62 of Murayama).

Arimoto in view of Webb is combinable with Murayama because they are from the same field of endeavor, namely the correction of scanners and scanned image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to receive an image signal over a communication line, as taught by Murayama, receive the image signal corrected by said correction unit taught by Arimoto in an external device over a communication line and use said print unit to print an image of the document corresponding to said corrected image signal on a print medium, as taught by Murayama. The motivation for doing so would have been to be able to remotely communicate the image data and corrected image data over a communication line, and to be able to output the data in a hardcopy form (column 9, lines 57-65 of Murayama), which is expected and desired in the printing arts. Therefore, it would have been obvious to combine Murayama with Arimoto in view of Webb to obtain the invention as specified in claim 14.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kanesaka et al., US Patent 6,023,532, 8 February 2000.

Suzuki et al., US Patent 5,802,217, 1 September 1998.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A Thompson whose telephone number is 703-305-6329. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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James A. Thompson  
Examiner  
Art Unit 2624

JAT  
August 16, 2004



THOMAS D.  
~~THOMAS~~ LEE  
PRIMARY EXAMINER